

WHAT IS CLAIMED IS:

1. A video display, comprising:  
a voltage correction table;  
a calibration unit configured to generate data in the voltage correction table; and  
5 at least one driver configured to drive at least one organic light emitting diode at  
a voltage defined, at least in part, by the voltage correction table.
2. The video display of Claim 1, wherein the voltage correction table  
includes a current to voltage lookup table, and wherein the driver uses data in the  
voltage lookup table, at least in part, to determine the driving voltage.
- 10 3. The video display of Claim 2, wherein the data in the current to voltage  
correction table is generated by providing a plurality of reference currents across at least  
the diode, measuring the corresponding output voltage, and storing the output voltage in  
the voltage correction table.
4. The video display of Claim 1, wherein the voltage correction table  
15 includes a pixel offset compensation table, and wherein the driver uses the pixel offset  
compensation table, at least in part, to determine the driving voltage.
5. The video display of Claim 1, wherein the voltage correction table  
includes a column resistance lookup table, and wherein the driver uses the pixel offset  
compensation table, at least in part, to determine the driving voltage.
- 20 6. The video display of Claim 1, wherein the organic light emitting diode is  
part of a passive matrix of light emitting diodes.
7. The video display of Claim 1, wherein the driver includes at least two  
capacitors, wherein the first of the at least two capacitors is chargeable to a first voltage  
to drive current across an organic light emitting diode in a first row of the video display,  
25 and wherein the second of the at least two capacitors is chargeable to a second voltage  
to drive current across an organic light emitting diode in a second row of the video  
display.
8. A video display, comprising:  
a current to voltage correction table, wherein data in the current to voltage  
30 correction table is generated by: providing a plurality of reference currents across a  
plurality of organic light emitting diodes, measuring a first set of output voltages for

each of the reference currents, averaging the measured voltages for each of the reference currents, and storing the averaged output voltage in the voltage correction table for each of the reference currents;

5 a pixel offset compensation table, wherein data in the pixel offset compensation table is generated by: driving each of the diodes with a known current, measuring a second set of output voltages, subtracting the stored average from the measured output voltages that corresponds to the known current, and storing the differences in the pixel offset compensation table;

10 a column resistance correction lookup table that indicates the column resistance of at least one of the organic light emitting diodes in the video display;

a calibration unit configured to generate the data in the current to voltage correction table, the pixel offset compensation table and the column resistance correction table; and

15 at least one driver configured to drive at least one organic light emitting diode at a voltage defined, at least in part, by the current to voltage correction table, the pixel offset compensation table and the column resistance correction table.

9. A video display, comprising:

a calibration unit configured to generate data for storage in a voltage correction table; and

20 at least one driver configured to drive a determined voltage and cause illumination of at least one pixel in the display, wherein the driver uses the data in the voltage correction table, at least in part, in determining an output voltage, wherein the driver includes at least two capacitors, wherein the first of the at least two capacitors is chargeable to a first voltage to drive current across a first organic light emitting diode in  
25 a first row of the video display, and wherein the second of the at least two capacitors is chargeable to a second voltage to drive current across a second organic light emitting diode in a second row of the video display.

30 10. The video display of Claim 9, wherein the first organic light emitting diode and the second organic light emitting diode are each part of a passive matrix of light emitting diodes.

11. A video display, comprising at least one driver for driving a determined voltage and causing illumination of a pixel in the video display, wherein the driver uses the data in a voltage correction table, at least in part, in determining an output voltage, and wherein the at least one driver drives at least one organic light emitting diode.

5 12. The video display of Claim 11, wherein the driver includes at least two capacitors, wherein the first of the at least two capacitors is chargeable to a first voltage to drive current across an organic light emitting diode in a first row of the video display, and wherein the second of the at least two capacitors is chargeable to a second voltage to drive current across an organic light emitting diode in a second row of the video display.

10 13. The video display of Claim 11, wherein the organic light emitting diode is part of a passive matrix of light emitting diodes.

14. A video display, comprising:

at least one driver configured to provide a determined voltage;

15 a current to voltage correction table that includes voltage data which identifies a voltage that is needed to provide a selected current to an average organic light emitting diode;

a pixel offset compensation table that includes voltage data which identifies a at least one voltage characteristic of a particular organic light emitting diode in the video display; and

20 a column resistance correction lookup table that includes voltage data that is used by the driver to compensate for resistance of columns in the video display.

15. A video display, comprising:

a matrix of organic light emitting diodes; and

25 at least one driver configured to drive a determined voltage across at least one of the organic light emitting diodes in the matrix and, wherein the at least one driver causes illumination of at least one of the organic light emitting diodes.

30 16. The video display of Claim 14, wherein the driver includes at least two capacitors, wherein the first of the at least two capacitors is chargeable to a first voltage to drive current across an organic light emitting diode in a first row of the video display, and wherein the second of the at least two capacitors is chargeable to a second voltage

to drive current across an organic light emitting diode in a second row of the video display.

17. The video display of Claim 14, wherein the organic light emitting diode is part of a passive matrix of light emitting diodes.

5 18. A system, comprising:

means for storing voltage data in a correction table;

means for determining a voltage using at least in part the voltage data from the correction table; and

10 means for applying the determined voltage across an organic light emitting diode.

19. The system of Claim 18, additionally comprising means for generating the data for storage in the correction table.

20. The system of Claim 18, additionally comprising:

15 means for charging a first capacitor, wherein the first capacitor is charged to a first voltage to drive current across an organic light emitting diode in a first row of the video display; and

means for concurrently using a second capacitor to drive a current across an organic light emitting diode in a second row of the video display.